MONTANA LEGISLATIVE HISTORY

Chapter 116 19 75

Bill H 473 S _____ Original bill & history ___C

H. Committee on Natural Resources			S. Committee on Natural Resources and Fish & Game		
Hearing Date(s)	Feb 18	✓C	Hearing Date(s)	Mar 11	✓C
	_____	___C		_____	___C
	_____	___C		_____	___C
	_____	___C		_____	___C
Date Out	Feb 18	✓C		Mar 14	✓C

BEST COPY AVAILABLE

Did this bill originate in an interim committee? ___Yes ___No

Committee _____ Report _____

LC 0875

House BILL NO. 473

INTRODUCED BY Fagan Lockrem Bradley Hagon Kemmis Lehrkind Burkhardt Meyerhoff Ellerd Mahe, Dussault

A BILL FOR AN ACT ENTITLED: "AN ACT REQUIRING THE ADOPTION OF RULES TO PROMOTE CONSERVATION AND EFFICIENT USE OF ENERGY IN THE STATE BUILDING CODE; AMENDING SECTIONS 69-2110 AND 69-2111, R.C.M. 1947."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MONTANA:

Section 1. Section 69-2110, R.C.M. 1947, is amended to read as follows:

"69-2110. Purposes of state building code. The state building code shall be designed to effectuate the general purposes of this chapter and the following specific objectives and standards to:

(1) provide reasonably uniform standards and requirements for construction and construction materials, consonant with accepted standards of design, engineering and fire prevention practices;

(2) permit to the fullest extent feasible, the use of modern technical methods, devices, and improvements which tend to reduce the cost of construction consistent with reasonable requirements for the health and safety of the occupants or users of buildings; and consistent with the conservation of energy by heating and cooling buildings in the most efficient manner possible;

(3) eliminate restrictive, obsolete, conflicting, and unnecessary building regulations and requirements which tend to increase unnecessarily construction costs or retard unnecessarily the use of proven new materials which have been found adequate through experience or testing, or provide unwarranted preferential treatment to types or classes of materials or products or methods of construction;

(4) ensure that buildings constructed with public funds are accessible to, and functional for, physically handicapped persons where practicable and feasible;

(5) encourage efficiencies of design and insulation which enable buildings to be heated in the winter with the least possible quantities of energy and to be kept cool in the summer without air conditioning equipment or with the least possible use of such equipment."

Section 2. Section 69-2111, R.C.M. 1947, is amended to read as follows:

"69-2111. Adoption of rules by department. (1) The department shall adopt by reference nationally recognized building codes in whole or in part, amend and repeal rules relating to the construction of all buildings or classes of buildings or the installation of equipment in those buildings, and may by rule prescribe standards or requirements for materials to be used in buildings including

INTRODUCED BILL

provisions dealing with safety, ~~and~~ sanitation and conservation of energy. The rules, when adopted as provided in this chapter, constitute the "state building code" and shall be acceptable for the buildings to which it is applicable.

(2) The department may hold hearings relating to the administration of this act in accordance with the Montana Administrative Procedure Act.

(3) Except as provided in subsection (4) of this section, no rule and no amendment or repeal of the state building code shall take effect until after a public hearing by the department.

(4) If a hearing has been held by the department of justice with respect to its duties contained in title 82, chapter 12, the board of plumbers, the department of health and environmental sciences, or state electrical board on a proposed rule relating to building and equipment standards in their respective fields, a public hearing by the department is not required. The proposed rule is effective upon approval of the department and filing with the secretary of state as a part of the state building code.

(5) If a rule relating to building or equipment standards is proposed by the department of justice with respect to its duties contained in Title 82, chapter 12, board of plumbers, department of health and environmental

sciences, or state electrical board which conflicts with the state building code, the department shall modify the proposed rule or the state building code to resolve the conflict after consultation with the state agencies affected."

-End-

stimony is exhibit 7.
Joseph J. Martin, Plumbers and Fitters Local 139, opposing, and
s written testimony is exhibit 8.
William A. Christman, Local Union 122, IBEW, opposing, exhibit 9.
Robert O. Geier, Bricklayers Local Union #3, BMPIU, opposing, his
itten testimony is exhibit 10.

copy of the Environmental Quality Council report on HB 581 is
hibit 11.

473 REP. FAGG, the chief sponsor, said this is a similar bill to the one he introduced a year ago, which is to adopt rules to promote conservation and efficient use of energy in the state building code. He said times have changed in the past year and we are looking a little differently at the energy picture. He said that as an architect he knows there are many ways we can build and design buildings to save energy--simply orientation of a building (how it relates to the sun and wind, nestling it into the topography); and other ways that would cost more initial money outlay like using certain materials on the outside surface like masonry, metal, glass, and having a reflective roof; even landscaping--trees and grass--plays an important role. Rep. Fagg read from the EQC report on this bill which is exhibit 12. He stated 20% of our energy consumption is in heating and cooling of buildings. He left three booklets for the committee to look over: "Energy Conservation in Building and Design" by the American Institutes of Architects; "Proposed Design and Evaluation Criteria for Energy

Conservation in Buildings" and "Energy Conservation in New Building Design" by the American Society of Housing, Refrigeration and Air Conditioning Engineers. Rep. Fagg also read a letter from Hugo Eck, professor of the School of Architecture at MSU, in which an amendment was suggested. A copy of this letter is exhibit 13.

As there were no other proponents and no opponents the meeting was opened to questions from the committee. In reply to a question Rep. Fagg said this would only cover public buildings.

HJR 29 JOHN VINCENT, the chief sponsor, stated this need for public access to public lands was a number one issue in the campaign. People are very concerned about the increasing difficulty of access--due to closing of long used roads by new purchasers of private lands (often out-of-staters). He said Reps. Leubeck and Huennekens both have bill on public access and he did not want his resolution to be thought of as a substitute for that legislation; however, if both passed there would still be a need for this study.

REP. LEUBECK stated he was very interested in this legislation. He said the Big Hole area of Butte was an example where roads were being closed to the public and there were lots of doubts as to the status of these roads.

REP. HUENNEKENS stated he rose in support. He said if his HB 98 should not pass, this study would keep alive a recognition and awareness that we do have a problem.

REP. ANDERSON stated he was very much in favor of this study.

BILL ROMINE, representing the Motorcyclists, stated he hoped his [illegible] would not harm the bill. His testimony is exhibit 14.

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EVERETT SNORTLAND, Farm Bureau, spoke next neither for or against the bill and his testimony is exhibit 15.

Rep. Vincent in his rebuttal said if this study is undertaken they would want to have the broadest range of public input that could be obtained.

Questions were asked the the committee.

EXECUTIVE SESSION

HJR 29 Rep. Meloy moved to amend on page 1, line 19, by striking the words "appoint the appropriate standing committee" and insert in lieu thereof the words "assign to the appropriate subcommittee" and conform the title; and as so amended do pass. Motion carried unanimously with those present (absent were Reps. Day, Barrett and Stolt

HB 473 The amendment in Mr. Fagg's letter from Mr. Eck was conside and Rep. Meloy moved that on page 1, lines 24 and 25 and on page 2, line 1 after "buildings" to strike material there and insert "and consistent with the conservation of energy by design requirements

and criteria that will result in the efficient utilization of energy, whether used directly or in a refined form, in buildings." Motion carried with Reps. Huennekens and Jim Moore voting no; Representatives Barrett, Day, and Stoltz absent.

Rep. Meloy moved a new subsection (6) on page 2, following line 16 to read: "(6) encourage efficiencies and criteria directed toward design of building envelopes with high thermal resistance and low air leakage and illumination systems which promote the efficient use of energy." Motion carried unanimously (Barrett, Day, Stoltz absent). Rep. Richards moved HB 473 as amended do pass. Motion carried unanimously (same absent as before).

HB 569 Debbie Schmidt discussed the amendments which are exhibit 16. Rep. Richards moved to accept the first listed amendment. Mot carried unanimously (absent Barrett, Day, Stoltz, Meloy). Rep. Jim Moore moved page 5, line 4 to strike "convey" and insert "rele and strike "mineral" and insert "surface." Motion carried, Meloy a (same absent as previous amendment). Rep. Moore (Jim) moved that on page 5, line 5 to strike "extracting such" and insert "permitting the extraction of subsurface". Motion carried, Meloy abstain and same absent. Rep. Moore moved that on line 14, page 5 "surfac be changed to "strip". Motion carried with Meloy abstaining and absent were Barrett and Stoltz. Rep. Jim Moore moved that HB 569 as so amended do pass. Motion carried with Rep. Meloy abstaining and Reps. Barrett and Stoltz absent.

HB 433 Rep. Kemmis moved do pass as amended. Rep. Jack Moore passed to the committee members a fact sheet on the safety of nuclear energy. This fact sheet is exhibit 17. He said he had worke in an atomic plant and considered it safe and thought a bill like this could do a lot of harm as we should be encouraging this type

STATE OF MONTANA

Environmental Quality Council

JOHN W. [illegible]
EXECUTIVE DIRECTOR

CAPITOL STATION, HELENA, MT. 59601

[illegible]
[illegible]
[illegible]

SENATE MEMBERS
[illegible] CHAIRMAN
[illegible]
[illegible]
[illegible]

HOUSE MEMBERS
REP. A. L. AINSWORTH
REP. DOROTHY BRADLEY
REP. LARRY FASBENDER
REP. THOMAS O. HAGER

APPOINTED MEMBERS
[illegible]
[illegible]
[illegible]
[illegible]

February 18, 1975

Prepared For: House Natural Resources Committee

Prepared By: Legislative Unit, Environmental Quality Council

HOUSE BILL 473

Sections 69-2105 to 69-2124, R.C.M., 1947, set up building and mobile home construction standards. The Department of Administration has been given authority to adopt the rules implementing a state building code under Section 69-2111, R.C.M., 1947. This act and rules apply to all public places outside of municipalities. Municipalities may draw up their own building code but any such code must be at least as strong as the state code. If no codes have been adopted by municipalities the state code does apply.

Section 69-2110, R.C.M., 1947 lists four specific objectives of the state building codes. They are:

Section 69-2110, R.C.M., 1947 lists four specific objectives of the state building codes. They are:

(1) provide uniform standards;
(2) permit the use of modern technical methods consist with health and safety requirements;
(3) eliminate restrictive, obsolete, conflicting and unnecessary building regulations and requirements;
(4) ensure that buildings constructed with public funds are accessible to physically handicapped persons.

House Bill 473 amends this act to provide for the consideration of energy conservation in the regulations of the state building code. The rule-making authority of the Department of Administration is expanded in Section 69-2111, R.C.M., 1947. Promulgation of energy conservation standards would be authorize in addition to the existing considerations of safety and sanitation.

Section 69-2110, R.C.M., 1947, which lists the specific objectives of the state building code, is also amended. House Bill 473 amends subsection 2 adding energy conservation to health and safety as specific goals of the act. A new subsection 5 is offered. This fifth objective would be to encourage building design and insulation to minimize the energy needed to heat buildings in the winter and to cool buildings in the summer.

The major uses for energy in buildings are space heating, air conditioning, and hot water heating. See the following table:

Total fuel energy consumption in the United States by end use. Electric utility consumption has been allocated to each end use.

End Use	Consumption (trillions of BTU)		Annual Rate of growth (%)	Percent of national total	
	1960	1968		1960	1968
Residential					
Space heating	4,848	6,675	4.1	11.3	11.0
Water heating	1,159	1,736	5.2	2.7	2.9
Air conditioning	134	427	15.6	0.3	0.7
Commercial					
Space heating	3,111	4,182	3.8	7.2	6.9
Water heating	544	653	2.3	1.3	1.1
Air conditioning	576	1,113	8.6	1.3	1.8

The major sources of heat loss or heat gain are inadequate insulation, excessiv ventilation, high rates of air infiltration from outside, and too many windows or openings.

An estimation of present building insulation and ventilation can be found by using the Federal Housing Administration (FHA) minimum property standards of 1965. Permitted heat losses were 2,000 BTU per thousand cubic feet-degree day. In 1970 standards required by Housing and Urban Development (HUD) reduced this figure to 1500 and the newly implemented FHA minimum standard (1972) required heat losses to be less than 1,000 BTU per thousand cubic feet-degree day.

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In 1970 standards required by Housing and Urban Development (HUD) reduced [illegible] figure to 1500 and the newly implemented FHA minimum standard (1972) required heat losses to be less than 1,000 BTU per thousand cubic feet-degree day.

These new standards affect new construction but because few buildings were designed to exceed past standards requirements we can assume that most residential buildings today consume about 40 percent more energy for heating and air condition than today's standards would allow. These types of energy losses present a significant leak in national energy consumption.[1]

1. Berg, Charles A., Energy Conservation through Effective Utilization, Science Vol. 181, July 13, 1973.

msu

COLLEGE OF PROFESSIONAL SCHOOLS MONTANA STATE UNIVERSITY BOZEMAN 59715

February 6, 1975

The Honorable Harrison Fagg
State Representative
House of Representatives
Helena, Montana 59601

Dear Mr. Fagg:

With respect to your House Bill 473 you might consider the following rewording which is consistent with the latest ASHRAE proposed standard 90P "Energy Conservation and New Building Design".

Consider rewording lines 24, 25, Page 1 and line 1 Page 2 to read as follows: "and consistent with the conservation of energy by design requirements and criteria that will result in the efficient utilization of energy, whether used directly or in a refined form, in buildings." Reword lines 12 through 16 inclusive, page 2 to possibly read as follows: "encourage requirements and criteria directed toward design

rewording which is consistent with the [illegible]
standard 90P "Energy Conservation and New Building Design".

Consider rewording lines 24, 25, Page 1 and line 1 Page 2 to read as follows: "and consistent with the conservation of energy by design requirements and criteria that will result in the efficient utilization of energy, whether used directly or in a refined form, in buildings." Reword lines 12 through 16 inclusive, page 2 to possibly read as follows: "encourage requirements and criteria directed toward design of building envelopes with high thermal resistance and low air leakage and toward requiring practices in the design and selection of mechanical, electrical and illumination systems which promote the efficient use of energy".

Respectfully,

Hugo G. Eck
Professor
School of Architecture

HGE/js

the state without obtaining the permission of the Fish and Game Commission.

Mr. Fletcher Newby, Deputy Director of the Fish and Game Department, said the bill clears up confusion as to the classification of nongame animals.

Senator Manley asked Mr. Newby where the Fish and Game Department obtained permission to bring in animals. Mr. Newby stated that the Department doesn't introduce any out-of-state animals.

CONSIDERATION OF HB 473: Act requiring the adoption of rules to promote conservation and the efficient use of energy in the state building code.

Representative Fagg, sponsor, stated the bill addresses the need for efficient use of energy in our buildings. With proper installation and proper design, a total of 40 percent of the building's energy can be preserved. If this bill were enacted, a total of 10 percent of Montana's energy could be saved.

Mr. Sonny Hanson, Montana Technical Council, said he supports the concept of this bill.

Representative Fagg stated the bill would apply to all public buildings.

Senator Smith wanted to know the additional cost factor that would be involved if the proper installation were used. Representative Fagg explained that it would depend upon how a building was erected; however, he assured the committee that some additional cost would be involved. Representative Fagg continued by

Senate Natural Resources and Fish & Game
Mar 11

*Rep. Russell Baeth

saying that in the long run, there would be a substantial financial savings in the heating and cooling of the building.

Senator Manley feels that one shouldn't be forced to abide by this law. He thinks it would be a good idea if architects and builders constructed buildings in this manner without having to be forced to do so. Representative Fagg agreed with Senator Manley that it would be a better method, but he said that engineers and architects wouldn't automatically do this.

CONSIDERATION OF HB 600: Clarify state policy on the management of state lands; etc.

Representative Bradley, sponsor, informed the members that the House passed several amendments to her bill which she explained briefly.

Mr. Ted Schwinden, Department of State Lands, stated that the Department supports the philosophy and the intent of HB 600. He distributed a document from the "Significance of the Trust Concept in the Administration and Management of Montana's School Lands." (See Attachment #1.)

Mr. Pat Sweency, Northern Plains Resource Council, stated his support for this legislation.

Mrs. Sandy Sargent, Environmental Information Center, stated that this bill expands the "multiple-use management" concept with regard to state lands by the inclusion of the long-term benefits to Montana's education system as well as the economy and environment of both the state and the local community. (See Attachment #2.)

Mr. Norm Starr, rancher from Big Timber, didn't really object to the bill. He just wanted to know if this non-monetary language could be nailed down a bit

and Galt voting no. (See attached roll call vote forms.)

DISPOSITION OF HB 473: Senator Watt moved HB 473 BE CONCURRED IN. The motion was seconded by Senator Colberg. Before the vote was taken, the committee discussed the bill further. Senator Manley feels this is a dictatory bill. A person should not be forced into using installation. Senator Colberg thought the intent of the bill was to encourage energy conservation. Senator Manley doesn't feel the subject has to deal with energy conservation but is rather letting the bureaucrats stick their noses into something that is none of their business.

Senator Jergeson thinks there is a compelling amount of interest to protect the general welfare by preserving energy. A roll call vote was taken; Senators Manley and Smith were the only members voting against Watt's motion.

CONSIDERATION OF HB 365: Senator Smith moved that HB 365 BE CONCURRED IN. The motion was seconded by Senator Jergeson and carried unanimously.

ADJOURNMENT: There being no further business to discuss, Senator Flynn adjourned the meeting at 11:00 a.m.

Elmer Flynn

SENATOR ELMER FLYNN, CHAIRMAN

STANDING COMMITTEE ... ...

March 11, 19 75

PRESIDENT:

We, your committee on NATURAL RESOURCES AND FISH & GAME

to had under consideration HOUSE Bill No. 473

HOUSE Bill No. 473

respectfully report as follows: That HOUSE Bill No. 473

BE CONCURRED IN

~~DO NOT PASS~~

STATE PUB. CO.
Helena, Mont.

SEN. ELMER FLYNN Chairman.

HOUSE BILL NO. 473

INTRODUCED BY FAGG, LOCKREM, BRADLEY, HAGER, MELOY, KEMMIS, SCHYE, BARDANOUVE, MENAHAN, ELLERD, MARKS, DRISCOLL, MCKITTRICK, LYNCH

A BILL FOR AN ACT ENTITLED: "AN ACT REQUIRING THE ADOPTION OF RULES TO PROMOTE CONSERVATION AND EFFICIENT USE OF ENERGY IN THE STATE BUILDING CODE; AMENDING SECTIONS 69-2110 AND 69-2111, R.C.M. 1947."

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF MONTANA:

Section 1. Section 69-2110, R.C.M. 1947, is amended to read as follows:

"69-2110. Purposes of state building code. The state building code shall be designed to effectuate the general purposes of this chapter and the following specific objectives and standards to:

(1) provide reasonably uniform standards and requirements for construction and construction materials, consonant with accepted standards of design, engineering and fire prevention practices;

(2) permit to the fullest extent feasible, the use of modern technical methods, devices, and improvements which tend to reduce the cost of construction consistent with reasonable requirements for the health and safety of the occupants or users of buildings; ~~and consistent with the conservation of energy by heating and cooling buildings in the most efficient manner possible~~ AND CONSISTENT WITH THE CONSERVATION OF ENERGY BY DESIGN REQUIREMENTS AND CRITERIA THAT WILL RESULT IN THE EFFICIENT UTILIZATION OF ENERGY, WHETHER USED DIRECTLY OR IN A REFINED FORM, IN BUILDINGS;

(3) eliminate restrictive, obsolete, conflicting, and unnecessary building regulations and requirements which tend to increase unnecessarily construction costs or retard unnecessarily the use of proven new materials which have been found adequate through experience or testing, or provide unwarranted preferential treatment to types or classes of materials or products or methods of construction;

(4) ensure that buildings constructed with public funds are accessible to, and functional for, physically handicapped persons where practicable and feasible~~.~~;

(5) encourage efficiencies of design and insulation which enable buildings to be heated in the winter with the least possible quantities of energy and to be kept cool in the summer without air conditioning equipment or with the least possible use of such equipment~~.~~;

(6) ENCOURAGE EFFICIENCIES AND CRITERIA DIRECTED TOWARD DESIGN OF BUILDING ENVELOPES WITH HIGH THERMAL RESISTANCE AND LOW AIR LEAKAGE AND TOWARD REQUIRING PRACTICES IN THE DESIGN AND SELECTION OF MECHANICAL,

REFERENCE BILL

ELECTRICAL AND ILLUMINATION SYSTEMS WHICH PROMOTE THE EFFICIENT USE OF ENERGY."

Section 2. Section 69-2111, R.C.M. 1947, is amended to read as follows:

"69-2111. Adoption of rules by department. (1) The department shall adopt by reference nationally recognized building codes in whole or in part, amend and repeal rules relating to the construction of all buildings or classes of buildings or the installation of equipment in those buildings, and may by rule prescribe standards or requirements for materials to be used in buildings including provisions dealing with safety, ~~and~~ sanitation and conservation of energy. The rules, when adopted as provided in this chapter, constitute the "state building code" and shall be acceptable for the buildings to which it is applicable.

(2) The department may hold hearings relating to the administration of this act in accordance with the Montana Administrative Procedure Act.

(3) Except as provided in subsection (4) of this section, no rule and no amendment or repeal of the state building code shall take effect until after a public hearing by the department.

(4) If a hearing has been held by the department of justice with respect to its duties contained in title 82,

chapter 12, the board of plumbers, the department of health and environmental sciences, or state electrical board on a proposed rule relating to building and equipment standards in their respective fields, a public hearing by the department is not required. The proposed rule is effective upon approval of the department and filing with the secretary of state as a part of the state building code.

(5) If a rule relating to building or equipment standards is proposed by the department of justice with respect to its duties contained in Title 82, chapter 12, board of plumbers, department of health and environmental sciences, or state electrical board which conflicts with the state building code, the department shall modify the proposed rule or the state building code to resolve the conflict after consultation with the state agencies affected."

-End-